

REMARKS

The present invention relates to an expression vector and its use to elicit a complete immune response in a mammal. More particularly, it relates to the processing of an endogenous antigen as an exogenous antigen for presentation on MHC-II and for methods of preventing and treating diseases.

The patent application filed herewith is a continuation of U.S. Patent Application 10/201,764, filed July 22, 2002, now allowed, which is a continuation of U.S. Patent Application No. 09/566,420, filed May 5, 2000, now issued as U.S. Patent No. 6,500,641, which claims the benefit of priority under 35 U.S.C. § 119 (e) to U.S. Provisional Patent Application Nos. 60/132,752, filed May 6, 1999 and 60/132,750, filed May 6, 1999.

Support for the addition of new claims 120-199 is found in the specification as filed and as set forth below. Therefore, these new claims do not constitute new matter.

Support for new claims 120 through 199 found in the specification as filed

Support for claim 120 relating to a method of identifying a polynucleotide is found in the specification. The specification starting on line 4 of page 42 discloses but does not limit the invention to a method of screening or identifying a polynucleotide sequence which encodes at least one MHC-II restricted epitope that is capable of eliciting an immune response in a mammal.

Claims 121-158 which depend from claim 120 merely incorporate the subject matter from the claims as issued in U.S. Patent 6,500,641. Therefore, claims 121-158 are also fully supported by the as-filed specification and do not constitute new matter.

Support for claim 159 relating to a method of identifying an antigen wherein the antigen is capable of eliciting an immune response *in vivo* is found beginning on line 14 of page 43. Thus, no new matter has been added.

Claims 160-197 which depend from claim 159 merely incorporate the subject matter from the issued claims as in U.S. Patent 6,500,641. Therefore, claims 160-197 are also fully supported by the as-filed specification and do not constitute new matter.

Support for amended claims 198 and 199 is found in the specification in Figure 2B. Figure 2B is a schematic representation of the expression vector NC-IL5-HbeAg comprising of a polynucleotide encoding a cell binding element cloned between a polynucleotide encoding a

signal sequence and a polynucleotide encoding an antigen. Alternatively, also illustrated in Figure 2B is the expression vector LNC-E7-Fc comprising of a polynucleotide encoding an antigen cloned between polynucleotide encoding the signal sequence and a polynucleotide encoding a cell binding element. Therefore, the illustrative examples of Figure 2B support interchangeable elements in the claimed expression vector; specifically that the polynucleotide encoding an antigen and a polynucleotide encoding a cell binding element are interchangeably linked.

Applicants respectfully submit that the as-filed specification amply supports and provides sufficient enablement for new claims 120-199. Further, Applicants submit that no new matter has been added in any way by the addition of claims 120-199.

Summary

Applicants respectfully submit that each of claims 120-199 is in condition for allowance. Consideration and allowance of these claims are respectfully requested at the earliest possible date.

Respectfully submitted,

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